

# Freeform Search

Database:	US Patents Full Text Database  JPO Abstracts Database  EPO Abstracts Database  Derwent World Patents Index  IBM Technical Disclosure Bulletins	
Term: Display:	11 and (ink jet\$ near10 electrostatic\$)  50 Documents in Display Format: KWIC Starting with Number 1	
Generate:	○ Hit List ● Hit Count ○ Image	
***************************************	Search Clear Help Logout Interrupt	
	Main Menu Show 8 Numbers Edit 8 Numbers Preferences	

# Search History

Today's Date: 11/7/2000

<b>DB Name</b>	<u>Query</u>	Hit Count	Set Name
USPT	<pre>11 and (ink jet\$ near10 electrostatic\$)</pre>	10	<u>L2</u>
USPT	((101/453  101/454  101/455  101/456  101/457  101/458  101/459  101/460  101/461  101/462  101/463.1  101/464  101/465  101/466  101/467 )!.CCLS.)	2027	<u>L1</u>



**Generate Collection** 

## Search Results - Record(s) 1 through 10 of 10 returned.

1. Document (10): US 6120655 A

L2: Entry 1 of 10

File: USPT

Sep 19, 2000

DOCUMENT-IDENTIFIER: US 6120655 A

TITLE: Process for producing printing plate for platemaking by

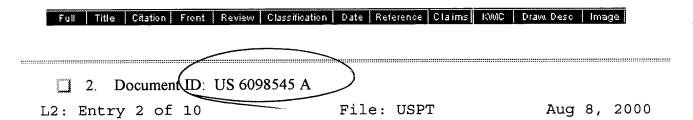
ink-jet system

#### DEPR:

The present invention is characterized in that images are formed by jetting oily ink with the aid of electrostatic field by the ink-jet system toward an image receiving layer that is provided on a water-resistant support, thus to obtain a lithographic printing plate from which a great number of printed sheets with sharp images can be produced.

#### CCXR:

101/463.1





TITLE: Oil-based ink for preparation of printing plate by ink jet process and method for preparation of printing plate using the same

#### DEPR:

The oil-based ink containing the electroscopic resin particles of the present invention is preferably employed in the ink jet recording method of the electric field controlling system in which the ink is discharged using electrostatic attraction, since the discharge of the oil-based ink is easily performed.

#### DEPV:

(1) a method for the preparation of a printing plate by an ink jet process as described above, wherein the oil-based ink is discharged using electrostatic attraction.

#### CLPR:

2. The method for the preparation of a printing plate by an ink jet process as claimed in claim 1, wherein the oil-based ink is discharged using electrostatic attraction.

CCOR: 101/465

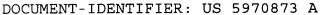
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3. Document ID: US 5970873 A

L2: Entry 3 of 10

File: USPT

Oct 26, 1999



TITLE: Imaging and printing methods to form imaging member by formation of insoluble crosslinked polymeric sol-gel matrix

#### BSPR:

Conventional continuous ink jet printing utilizes electrostatic charging "tunnels" that are placed close to the point where the ink drops are formed in a stream. In this manner, individual drops may be charged, and these drops may be deflected downstream by the presence of deflector plates that have a large potential difference between them. A gutter (sometimes known as a "catcher") may be used to intercept the charged drops, while the uncharged drops are free to strike the recording medium. If there is no electric field present, or if the drop break off point is sufficiently far from the electric field (even if a portion of the stream before the drop break off point is in the presence of an electric field), then charging will not occur. In order to avoid these complications and uncertainties, it is desirable to avoid the use of electrostatic charging tunnels when using ink jet printing.

CCOR:

101/466

CCXR:

101/455

CCXR:

101/457

CCXR:

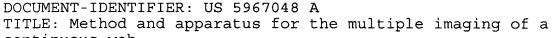
101/462

L2: Entry 4 of 10

	ull	Title	Citation	Frent	Review	Classifica	tion Dat	e Referenc	e Claims	KWIC	Draw Des	c Image	
ĵ,	Z] , 4	4. I	Documen	nt ID:	US 596	57048 A							

File: USPT

Oct 19, 1999



continuous web

#### BSPR:

Several options are available for forming an image on a lithographic plate. Digital imaging by a computer controlled laser is a relatively new technology that eliminates the need for imaging and processing film. The digital imaging can take place as a result of selective ablation, curing or photolytic alteration of the solubility of the coating. At the present time, the cost of digital plates is typically higher than for conventional analog type plates. Another alternative imaging technique involves the use of electrostatic ink jet deposition technology. There are again several approaches. One can ink jet an oleophilic material directly onto a hydrophilic substrate. An ink jet material can be coated onto a photosensitive coating and serve as a photomask for actinic exposure in either a positive or negative mode. U.S. Pat. No. 5,750,314 to Fromson et al discloses an insoluble ink jet coating selectively applied over a soluble lithographic coating which need not be photosensitive. The insoluble ink jet mask prevents the soluble coating from being removed by the solvent. Each of these imaging techniques has a particular advantage. It would, therefore, be desirable to have different types of imagers available without consuming excess space in the printing plant.

CCOR: 101/463.1

CCXR:

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5. Document ID: US 5852975 A

L2: Entry 5 of 10 File: USPT Dec 29, 1998

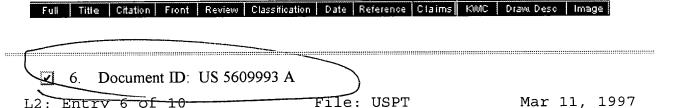
DOCUMENT-IDENTIFIER: US 5852975 A

TITLE: Method for making lithographic plates using an ink-jet printer

#### BSPR:

The method for making a lithographic plate according to the present invention comprises 1) providing a lithographic plate material having an image receiving layer provided on a surface of a flexible plastic film and receptive of hot-melt compounds constituting hot-melt type ink, 2) recording an image on the image receiving layer of the lithographic plate material with the hot-melt ink using an ink-jet printing system and 3) using an etching solution to etch and make hydrophilic parts of the image receiving layer where no hot-melt image is present. Occurrence of unwanted background image on the resulting lithographic plate can be completely prevented by using this hot-melt ink type ink-jet printing system because there is no possibility of scattering of toner due to electrostatic charging upon peeling.

CCOR: 101/463.1



DOCUMENT-IDENTIFIER: US 5609993 A

TITLE: Process for producing lithographic printing plate, photosensitive plate and aqueous ink composition therefor

#### DEPR:

In case where an ink jet printing process is a continuous jet type, it is preferred that the surfactant is nonionic because the ink composition is electrostatically charged at the tip point of an ink jet nozzle and the charged ink drop changes its direction within an electric field.

CCXR:

101/463.1

CCXR:

101/465

CCXR:

101/467

DOCUMENT-IDENTIFIER: US 4930417 A
TITLE: Printer for simultaneously forming planographic printing surfaces and printing ink images

### BSPR:

Printers used as the output equipments of information processing systems are classified roughly into impact printers and nonimpact printers. Recently, demand for nonimpact printers, which are capable of operating silently, printing pictures and graphs and high extendability, has increased greatly. Typical nonimpact printers are electrophotographic printers using toner as a visible image forming medium, ink-jet printers which jet ink particles electrostatically and thermal printers which use a fusible or sublimable thermal transfer ribbon.

CCOR: 101/465

CCXR: 101/453

CCXR: 101/467

Full	Title   Citation	Front Revie	w Classification	Date Reference		MC Draw Des	
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			Terms			Documen	ts
11.						***************************************	

Display Format: KWIC Change Format

# WEST

#### **Generate Collection**

### **Search Results -** Record(s) 1 through 10 of 10 returned.

1. Document ID: US 6143806 A

L3: Entry 1 of 10

File: USPT

Nov 7, 2000

US-PAT-NO: 6143806

DOCUMENT-IDENTIFIER: US 6143806 A

TITLE: Oil-based ink for preparing printing plate by ink jet process and method for preparing printing plate by ink jet process

DATE-ISSUED: November 7, 2000

INVENTOR - INFORMATION:

CITY STATE ZIP CODE COUNTRY NAME Kato; Eiichi Shizuoka N/AN/AJPX Osawa; Sadao Shizuoka N/A JPX N/A N/A JPX Ishii; Kazuo Shizuoka N/A

US-CL-CURRENT: 523/160; 430/49

1/16/98

Full Title Citation Front Review Classification Date Reference Claims KWC Draw Desc Image

2. Document ID: US 6140389 A

L3: Entry 2 of 10

File: USPT

Oct 31, 2000

US-PAT-NO: 6140389

DOCUMENT-IDENTIFIER: US 6140389 A

TITLE: Oil-based ink for printing plate by ink jet process and

method for preparing printing plate by ink jet process

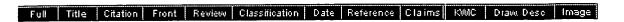
DATE-ISSUED: October 31, 2000

INVENTOR - INFORMATION:

ZIP CODE NAME CITY STATE COUNTRY Shizouka N/A N/A JPX · Kato; Eiichi N/A Osawa; Sadao Shizouka N/AJPX N/A N/AJPX Ishii; Kazuo Shizouka

US-CL-CURRENT: 523/160; 430/49

1/20/98



3. Document ID: US 6136889 A

L3: Entry 3 of 10

File: USPT

Oct 24, 2000

US-PAT-NO: 6136889

DOCUMENT-IDENTIFIER: US 6136889 A

TITLE: Oil-based ink for preparing printing plate by ink jet process and method for preparing printing plate by ink jet process

DATE-ISSUED: October 24, 2000

INVENTOR - INFORMATION:

STATE ZIP CODE COUNTRY NAME CITY Shizuoka N/AN/AJPX Kato; Eiichi N/AOsawa; Sadao Shizuoka N/A JPX N/AN/AJPX Ishii; Kazuo Shizuoka

US-CL-CURRENT: 523/160; 430/49

1/2

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWC	Drawa Desc	Image

4. Document ID: US 6133341 A

L3: Entry 4 of 10

File: USPT

Oct 17, 2000

US-PAT-NO: 6133341

DOCUMENT-IDENTIFIER: US 6133341 A

TITLE: Oil-based ink for preparation of printing plate by ink jet process and method for preparation of printing plate using the same

DATE-ISSUED: October 17, 2000

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Kato; Eiichi Shizuoka N/A N/A JPX \darkappa/

US-CL-CURRENT: 523/160; 430/49

Full Title Citation Front Review Classification Date Reference Claims KMC Draw Desc. Image

5. Document ID: US 6127452 A

L3: Entry 5 of 10 File: USPT Oct 3, 2000

US-PAT-NO: 6127452

DOCUMENT-IDENTIFIER: US 6127452 A

TITLE: Oil-based ink for printing plate by ink jet process and

method for preparing printing plate by ink jet process

DATE-ISSUED: October 3, 2000

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Kato; Eiichi Shizuoka N/A N/A JPX

US-CL-CURRENT: 523/160; 430/49

4/27

☐ 6. Document ID: US 6120655 A

L3: Entry 6 of 10

File: USPT

Sep 19, 2000

US-PAT-NO: 6120655

DOCUMENT-IDENTIFIER: US 6120655 A

TITLE: Process for producing printing plate for platemaking by

Full Title Citation Front Review Classification Date Reference Claims KMC Draw Desc Image

ink-jet system

DATE-ISSUED: September 19, 2000

INVENTOR-INFORMATION:

ZIP CODE COUNTRY NAME STATE Shizuoka N/A N/AJPX Ishii; Kazuo JPX Osawa; Sadao Shizuoka N/AN/A N/AJPX Kato; Eiichi Shizuoka N/A

US-CL-CURRENT: 204/164; 101/463.1

1/20



7. Document ID: US 6106984 A

L3: Entry 7 of 10 File: USPT Aug 22, 2000

US-PAT-NO: 6106984

DOCUMENT-IDENTIFIER: US 6106984 A

TITLE: Lithographic printing plate precursor and method for

preparing lithographic printing plate using the same

DATE-ISSUED: August 22, 2000

INVENTOR - INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Kato; Eiichi Shizuoka N/A N/A JPX

N/A JPX Kasai; Seishi Shizuoka N/A

US-CL-CURRENT: 430/49

Full Title Citation Front Review Classification Date Reference Claims KWC Draw. Desc Image

8. Document ID: US 6098545 A

File: USPT Aug 8, 2000 L3: Entry 8 of 10

US-PAT-NO: 6098545

DOCUMENT-IDENTIFIER: US 6098545 A

TITLE: Oil-based ink for preparation of printing plate by ink jet process and method for preparation of printing plate using the same

DATE-ISSUED: August 8, 2000

INVENTOR-INFORMATION:

CITY STATE ZIP CODE COUNTRY NAME

N/A N/A JPX Kato; Eiichi Shizuoka

US-CL-CURRENT: 101/465; 347/96, 523/160

Full Title Citation Front Review Classification Date Reference Claims KWC Draw. Desc Image

9. Document ID: US 6080449 A

Jun 27, 2000 L3: Entry 9 of 10 File: USPT

US-PAT-NO: 6080449

DOCUMENT-IDENTIFIER: US 6080449 A

TITLE: Oil-based ink for preparing printing plate by ink jet process and method for preparing printing plate by ink jet

process

DATE-ISSUED: June 27, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Kato; Eiichi	Shizuoka	N/A	N/A	JPX
Osawa; Sadao	Shizuoka	N/A	N/A	JPX
Ishii; Kazuo	Shizuoka	N/A	N/A	JPX

US-CL-CURRENT: 427/458; 427/340, 427/412.1, 427/421, 427/58

Full Title Citation Front Review Classification Date Reference Claims KWC Draw Desc Image

10. Document ID: US 5035971 A

L3: Entry 10 of 10

File: USPT

Jul 30, 1991

US-PAT-NO: 5035971

DOCUMENT-IDENTIFIER: US 5035971 A

TITLE: Electrostatic photographic liquid developer

DATE-ISSUED: July 30, 1991

INVENTOR-INFORMATION:

CITY STATE ZIP CODE COUNTRY NAME N/A Shizuoka N/AJPX Kato; Eiichi Shizuoka N/AN/A JPX Ishii; Kazuo

US-CL-CURRENT: 430/114; 430/119

Full Title Citation Front Review Classification Date Reference Claims KWC Draw Desc Image

**Generate Collection** 

Terms	Documents
ink jet\$ and (nonaqueous same electric resistance same dielectric	10
constant)	10

Display

50 Documents, starting with Document: 10